

# HIGH-PRESSURE TANK AND METHOD FOR FABRICATING THE SAME

## CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part application of U.S. Patent Application No. 5 10/307,495 filed on December 2, 2002.

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## BACKGROUND OF THE INVENTION

### (1) Field of the Invention

This invention relates to improvements of a high-pressure tank into which 10 high-pressure gas is charged and improvements of a method for fabricating the same.

### (2) Description of the Related Art

High-pressure tanks into which a gas, such as natural gas or hydrogen gas, is charged and stored at high pressure, are generally subjected to winding which is a 15 technique for wrapping carbon fibers or the like around the tank body for reinforcement. A cylindrical gas discharge section and a continuous dome section of the tank, in particular, are likely to concentrate stress and therefore must be reinforced firmly. However, the vicinity of the boundary between the dome section and the cylindrical gas discharge section is difficult to subject to winding and thus difficult to reinforce.

20 Therefore, the dome section and the cylindrical gas discharge section are generally increased in thickness as compared with a cylindrical middle section of the tank by necking a predetermined region of an elongated hollow cylindrical blank continuing from its opening end by means of spinning.

In this connection, the applicant filed a patent application on a technique for 25 further thickening the dome section and the cylindrical gas discharge section by flow forming the predetermined region of the elongated hollow cylindrical blank continuing from its opening end into a larger thickness than the other region and then necking the